UNITED
NATIONS

Framework Convention on
Climate Change

Distr.
GENERAL

FCCC/IDR.1(SUM)/SWE
12 December 1995

Original: ENGLISH

SUMMARY

of the

REPORT OF THE IN-DEPTH REVIEW OF THE NATIONAL COMMUNICATION

of

SWEDEN

(The full text of the report (in English only) is contained in document FCCC/IDR.1/SWE)

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GE.95-64610

Summary [1]

1. The in-depth review of the national communication was carried out from March to July 1995 and included a visit by the team from 13 to 17 March 1995. The team included experts from Brazil, Bulgaria and the United States of America. Since the communication was submitted, Sweden has changed Government and joined the European Union. These changes are not in themselves expected to have any major impacts on its climate change policy.

2. The team concluded that the communication generally followed the format set out in the guidelines. In some areas, such as the methodologies for assessing carbon sinks and for estimating effects of measures, the reported approaches were particularly innovative and/or advanced. In other areas, additional material or information provided during the visit supplemented and clarified the communication.

3. Particularly important national circumstances are that 95 per cent of the electricity production is currently based on hydro and nuclear power. In addition, Sweden has a relatively high proportion of biofuels and district heating in the energy system, and high taxes (and prices) applied on fossil fuels for most users. This results in lower per capita emissions of carbon dioxide (CO_2) (7 tons) than other member countries of the Organisation for Economic Co-operation and Development (OECD), which have approximately 12 tons on average. Also important is the openness of the economy, which interlinks domestic and international markets for energy and industrial goods. The decision to phase out nuclear power by 2010 as a result of a referendum in 1980 and limitations to further hydro power development are other crucial framework conditions.

4. CO_2 emissions were reduced by 40 per cent between 1970 and 1990 owing to the development of nuclear and hydro power and improvements in energy efficiency. At present, the biggest source of CO_2 emissions is transport, which accounted for 38 per cent of total emissions in 1990.

5. The goal set by the Riksdag (parliament) is that emissions of CO_2 from fossil fuels in the year 2000 shall be stabilized at the 1990 level and shall decline after that. Furthermore, emissions of methane from landfills shall be reduced by 30 per cent between 1990 and 2000. The team concluded that Sweden has a comprehensive approach to climate change, including efforts to address all sources and sinks in inventories, projections, and policies and measures. A number of policies and measures have been implemented, most notably the CO_2 tax introduced in 1991 and now covering approximately 75 per cent of these emissions, which, together with other tax measures, is expected to account for 70 per cent of the estimated effects of measures in 2000. The team also concluded that climate change concerns have been integrated in major sectoral decisions (such as energy, finance/taxation, development

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1 In accordance with decision 2/CP.1, the full draft of this report was communicated to the Swedish Government, which had no further comments.

programmes, waste, agriculture and forestry), although Sweden recognizes that efforts are needed to improve the situation in some areas.

6. The team noted that the effects of the measures in place are already considerable and are expected to reduce CO_2 emissions in 2000 by 14 per cent (10 400 Gigagrams (Ggs)) compared with the level projected on the basis of the policies and measures in place in 1990. This effect will be achieved mainly through taxation measures. However, existing measures are not expected to be sufficient to fully stabilize emissions of CO_2 (which show 4 per cent growth in the projections) or of all greenhouse gases (which show 5 per cent growth) in 2000 at 1990 levels. The growth in CO_2 is due to increasing emissions from the transport sector (16 per cent), which is the largest source of emissions, and a return to average emissions from the energy and transformation sector, reflecting the fact that 1990 was an unusually mild year with high precipitation, causing low heat demand and high electricity production. The emissions may increase further by 2005 (11 per cent for CO_2 and 9 per cent for all gases) if additional measures are not introduced. Such measures, including a wider application of the CO_2 tax, would, according to Sweden, often require international coordination. If Sweden pursues the decision to phase out nuclear power by 2010, it is likely to result in a sharp increase in CO_2 emissions.

7. Swedish forests constitute a large carbon reservoir. However, even though at present the sink capacity is considerable in comparison to the CO_2 emissions, the net sequestration is expected to level off in a few decades. Keeping the level of carbon stored in the forest will demand a continued sustainable forestry policy.

8. The team found that Sweden, being a country adapted to a high natural climate variability, has not implemented specific adaptation measures as a response to climate change. Nevertheless, studies are being carried out and it is recognized that this issue, including the vulnerability of relevant sectors of the economy, needs to be examined further. Sealevel rise is not of great concern because the rate of uplift is greater than projected changes in sealevel.

9. Sweden has contributed its share to the Global Environment Facility (GEF) both in the pilot phase and the replenishment (1994-1997). Additional resources are being transferred to projects aimed at reducing greenhouse gases in Eastern Europe. Official development assistance is, and has been, well above 0.7 per cent of gross national product (GNP) for a number of years, even though it recently declined because of the economic recession. In 1993 it corresponded to 0.98 per cent of GDP according to OECD, Development Assistance Committee (DAC) statistics.

10. The team noted that further development of Swedish policy on climate change must be seen as a continuous process where conclusions from the parliamentary commissions on energy policy, ecological tax reform and transport issues working at the time of the review visit might entail some changes.

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